REMARKS

Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested. No claims have been canceled. Claims 6, 7, 15, 16, 24, and 28-36 have been amended. Claims 6-9, 15-18, and 24-36 are currently pending in the application.

CLAIM REJECTIONS – 35 USC 112, SECOND PARAGRAPH

The Office Action rejected Claims 6, 15, and 24 under 35 USC 112, second paragraph due to lack of antecedent basis. Claims 6, 15, and 24 have been amended. Applicants respectfully submit that the amendment cures any lack of antecedent basis. Therefore, Applicants respectfully request that the rejection of Claims 6, 15, and 24 under 35 USC 112, second paragraph be withdrawn.

CLAIM REJECTIONS – 35 USC 103(a)

The Office Action rejected Claims 6, 9, 15, 18, 24, 27, 28, 31, and 34 under 35 USC 103(a) as allegedly unpatentable over Courts et al., U.S. Patent No. 6,076,108 ("Courts") in view of Hickman et al., U.S. Patent No. 6,564,252 ("Hickman"). The Office Action rejected Claims 29, 30, 32, 33, 35, and 36 under 35 USC 103(a) as allegedly unpatentable over Courts in view of Hickman and Bellemore et al., U.S. Patent No. 6,088,728 ("Bellemore"). The Office Action rejected Claims 7, 8, 16, 17, 25, and 26 under 35 USC 103(a) as allegedly unpatentable over Courts in view of Hickman and Bayeh et al., U.S. Patent No. 6,098,093 ("Bayeh"). The rejections are respectfully traversed.

Claims 6, 9, 15, 18, 24, 27, 28, 31, and 34

Independent Claim 6 recites:

> A computer system, comprising:
> a memory-mapped file;
> a first server process, said first server process servicing a first request pertaining to a particular session, said first server process storing session information pertaining to said particular session in said memory-mapped file; and
> a second server process, said second server process servicing a second request pertaining to said particular session, said second server process accessing said session information from said memory-mapped file and using said session information to service said second request;
> wherein said memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of a memory space of said second server process. (emphasis added)

The computer system of Claim 6 advantageously enables session information to be shared across multiple processes in a multi-process environment. To enable such sharing, a shared memory-mapped file is mapped to the memory space of multiple processes. The processes use this memory-mapped file to store session information. Because the memory spaces of the processes are mapped to the memory-mapped file, and because the processes use the memory-mapped file to store session information, the processes are able to share the session information in the memory-mapped file. Thus, sessions are no longer maintained on a process-specific basis. Rather, they are maintained on a centralized, shared basis. As a result, different requests pertaining to the same session may be serviced by different server processes without any adverse effects. Each process is able to access and manipulate all of the state information pertaining to a particular session. By enabling session information to be shared across multiple processes, the computer system of Claim 6 eliminates the session management shortcomings experienced by the prior art.

Furthermore, by mapping the memory space of each of the processes to a shared memory-mapped file, the computer system of Claim 6 avoids the inefficiencies of storing and retrieving session information via requests to and responses from a server. The direct reading and writing of session information to a shared memory-mapped file is faster than the reading and writing of session information via requests to and responses from a server. Furthermore, by permitting processes to continue to read and write session information to their own memory spaces, which are mapped to the shared memory-mapped file, the processes do not need to be modified or configured to send requests to and receive responses from a server.

Such a computer system is neither disclosed nor suggested by Courts. Instead of teaching that session information is stored in a shared memory-mapped file, Courts discloses that session information is stored via requests to a global session server. Indeed, the Office Action concedes that Courts fails to teach or suggest a memory-mapped file as recited by Claim 6. Thus, taken individually, Courts fails to teach or suggest the computer system of Claim 6.

Taken individually, Hickman also fails to teach or suggest the computer system of Claim 6. The Office Action alleges that Hickman discloses a memory-mapped file that is mapped to the memory spaces of multiple server processes in col. 5, line 44 to col. 6, line 27. However, what Hickman actually describes in the cited text is a "partition map," which is not the same as a memory-mapped file.

As recited in Claim 6, the memory-mapped file is mapped to at least a portion of a first server process' memory space and at least a portion of a second server process' memory space. In the computer system context, a "process" is a program that is executing on a computer. A process' "memory space" maps to physical memory that has

been allocated for use by that process. In Claim 6, the memory space portions of the two server processes map to the same physical memory. In the computer system context, the word "memory" does not normally refer to "secondary" storage such as a computer's hard disk drive.

In contrast, Hickman's partition map "translates" clients to corresponding "partitions" (col. 6, lines 16-18). As used in Hickman, a "partition" is a "unique home directory within one of the storage clusters" (col. 5, lines 65-66). In the computer system context, the word "directory" normally refers to a node of a hierarchically organized file system. Such file systems are normally stored within a computer's "secondary" storage, such as a hard disk drive, rather than in a computer's memory.

In col. 7, line 60, to col. 8, line 7, Hickman describes in greater detail what a "partition map" is. The partition map comprises a plurality of tables. The tables map partition names to partition IDs, and partition IDs to cluster IDs, which correspond to storage clusters. The storage clusters are groups of "storage servers" (col. 6, lines 3-4). As used in Hickman, a storage server is a computer (col. 3, lines 50-53) rather than a process executing on a computer.

From the above discussion, it is clear that Hickman's partition map is not a memory-mapped file that is mapped to the memory spaces of first and second server processes as recited in Claim 6. Instead, Hickman's partition map is a set of tables that map file system directories to groups of computers that store those file system directories. The partition map described in Hickman does not perform, and cannot be made to perform, the same functions as the memory-mapped file recited in Claim 6. Consequently, Hickman fails to teach or suggest "wherein the memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a

portion of a memory space of said second server process" as recited in Claim 6. Thus, taken individually, Hickman fails to teach or suggest the computer system of Claim 6.

Even combined (assuming arguendo that it would have been obvious to combine the references), Courts and Hickman fail to teach or suggest all of the limitations of Claim 6. As discussed above, neither of these references discloses or suggests "wherein the memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of a memory space of said second server process." Thus, even if the references were combined, they would still fail to disclose or suggest this aspect of Claim 6. For at least this reason, Applicants submit that Claim 6 is patentable over Courts and Hickman, taken individually or in combination.

Applicants further submit that Claims 9 and 28, which depend from Claim 6 and which recite further advantageous aspects of the invention, are also patentable over Courts and Hickman, taken individually or in combination, for at least the reasons given above in connection with Claim 6.

Claims 15, 18, and 31 are method claims, which are analogous to the computer systems of Claims 6, 9, and 28, respectively. Applicants submit that Claims 15, 18, and 31 are patentable over Courts and Hickman, taken individually or in combination, for at least the reasons given above in connection with Claims 6, 9, and 28, respectively.

Claims 24, 27, and 34 are computer-readable medium claims, which are analogous to the methods of Claims 15, 18, and 31, respectively. Applicants submit that Claims 24, 27, and 34 are patentable over Courts and Hickman, taken individually or in combination, for at least the reasons given above in connection with Claims 15, 18, and 31, respectively.

Claims 7, 8, 16, 17, 25, 26, 29, 30, 32, 33, 35, and 36

Claims 7, 8, 29, and 30 depend from Claim 6. As discussed above, Claim 6 requires "wherein the memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of a memory space of said second server process." By virtue of their dependence from Claim 6, Claims 7, 8, 29, and 30 also include this limitation.

As discussed above, Courts and Hickman, taken individually or in combination, do not in any way disclose or suggest this limitation. Thus, Claims 7, 8, 29, and 30 are patentable over Courts and Hickman, taken individually or in combination.

Bellemore and Bayeh also fail to disclose or suggest this limitation. In fact, the Office Action does not even allege that Bellemore or Bayeh discloses or suggests this limitation. Thus, Claims 7, 8, 29, and 30 are patentable over Bellemore and Bayeh, taken individually.

Even combined (assuming arguendo that it would have been obvious to combine the references), Courts, Hickman, Bellemore and Bayeh fail to disclose or suggest all of the limitations of Claims 7, 8, 29, and 30. As discussed above, none of these references discloses or suggests "wherein the memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of a memory space of said second server process." Thus, even if the references were combined, they would still fail to disclose or suggest this aspect of Claims 7, 8, 29, and 30. For at least this reason, Applicants submit that Claims 7, 8, 29, and 30 are patentable over Courts, Hickman, Bellemore, and Bayeh, taken individually or in combination.

Claims 16, 17, 32, and 33 are method claims, which are analogous to the computer systems of Claims 7, 8, 29, and 30, respectively. Applicants submit that

Claims 16, 17, 32, and 33 are patentable over Courts, Hickman, Bellemore, and Bayeh, taken individually or in combination, for at least the reasons given above in connection with Claims 16, 17, 32, and 33, respectively.

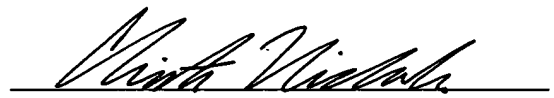
Claims 25, 26, 35, and 36 are computer-readable medium claims, which are analogous to the methods of Claims 16, 17, 32, and 33, respectively. Applicants submit that Claims 25, 26, 35, and 36 are patentable over Courts, Hickman, Bellemore, and Bayeh, taken individually or in combination, for at least the reasons given above in connection with Claims 16, 17, 32, and 33, respectively.

For at least the reasons set forth above, Applicants respectfully submit that all pending claims are patentable over the art of record, including the art cited but not applied. Accordingly, allowance of all pending claims is respectfully solicited.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: FEBRUARY 23, 2004



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